

Project Description

Montara Water and Sanitary District (MWSD or District) seeks funding through the Local Groundwater Assistance (LGA) fund to develop the Mid-Coastside Multi-Basin Groundwater Management Plan (GWMP). The Mid-Coastside GWMP will be designed to promote sustainable resource use and effective long-term planning of groundwater throughout the San Mateo County Midcoast. The San Mateo County Midcoast extends from northern Half Moon Bay to Devil's slide and encompasses the communities of Montara, Moss Beach, Princeton, El Granada, and Miramar. The San Mateo Midcoast groundwater is found in the Half Moon Bay Terrace Basin¹, a 9,150 acre basin located within the San Francisco Bay Hydrologic Region (see Figure 1).

MWSD proposes to develop the initial phase of the GWMP with LGA grant monies. Due to the complexity of the groundwater sub-basins throughout the Midcoast the primary focus of this initial GWMP is the Airport Terrace Sub-basin ("Airport Aquifer"). The Airport Aquifer is located at the base of the San Vicente Creek in the Half Moon Bay Airport in northern portion of the Half Moon Bay Terrace Basin (see Figure 2). It is the most dominant aquifer in the area and is a primary focus in the region for groundwater studies², Environmental Impact Reports³, monitoring efforts⁴ and other State funding applications⁵ (see Files 2-8). MWSD and Coastside County Water District (CCWD) extract groundwater from the aquifer using domestic wells. In addition, groundwater is extracted through irrigation and domestic wells owned by Millennium Housing Pillar Ridge Mobile Home Park. Water quality concerns were elevated following the identification of nitrates, manganese, corrosivity and 1,2,3-TCP in the aquifer.

Adoption and implementation of the Mid-Coastside GWMP will improve groundwater management and knowledge of Midcoast basins within San Mateo County. This initial plan will be the first groundwater management plan developed in the Midcoast. The Mid-Coastside GWMP is intended to be adaptive to changing conditions within the Midcoast aquifers and will be updated and revised over time to reflect progress made in achieving the GWMP objectives. The objectives of the plan is as follows:

- Develop the first Mid-Coast GWMP (primary focus on Airport Aquifer);
- Establish an Advisory Committee of Midcoast Stakeholders;
- Measure key hydrologic data needed for Midcoast basin management;
- Establish ongoing funding to maintain and update the Mid-Coastside GWMP to include remaining Midcoast sub-basins; and
- Serve as a needed model for other small coastal basins on the California coast.

¹ DWR Bulletin 118 Basin 2-22

² Balance Hydrologics, Inc., 2002, San Mateo County Mid-Coast Aquifers: Literature and Data Review Kleinfelder, 2008, San Mateo County Midcoast Groundwater Study, Phase II Balance Hydrologics, Inc., 2010, Midcoast Groundwater Study Phase III

³ Kleinfelder, 1989, Draft Montara – Moss Beach Water Well EIR

⁴ Montara Water and Sanitary District, 2011, CASGEM Monitoring Plan

⁵ Montara Water and Sanitary District, 2006, SRF Application No. 4110010-024 Water System Engineering Report Montara Water and Sanitary District, 2009, Proposition 50 Application No. P50-4110010-117 Technical Report

The goal of the Mid-Coastside GWMP is to support the interest of its stakeholders and the public, ensure the future of groundwater supplies for the Midcoast, prevent further contamination of groundwater resources, and facilitate remediation efforts.

Data Collection and Analysis

An in-depth review of available water supplies (surface, ground, recycled, municipal, agricultural, and imported water sources) and their uses in the Midcoast will be prepared. A water supply balance will be developed for existing conditions as well as for expected changes in population, land use patterns, and water demands.

Data and information collection will include:

- Groundwater levels, historical;
- Groundwater quality, historical;
- Geologic data and reports including drillers logs
- Water demand and supply, historical and projected;
- Data and information on monitoring activities;
- Data and information on potential future projects;
- Information on the coordination with land use, zoning, or water management planning;
- Information on potential supply-increase or demand-reduction projects; and
- Information on monitoring.

The information gathered will be presented in a manner that provides a complete description of the area to be managed under the Mid-Coastside GWMP, including:

- Physical structure and characteristics of the aquifer system;
- Summary of historical data;
- Issues of concern; and
- Discussion of historical and projected water demands and supplies.

Data collected will be analyzed to provide a review and document the historical and existing conditions in the Airport Aquifer. Analysis will include geological conditions with cross sections, water demands, water supply, and water quality. Quality verification and statistical checks will be performed in order to achieve consistency of the data collected. Quality assurance will entail review by a California registered Professional Geologist and Professional Engineer for all collected data.

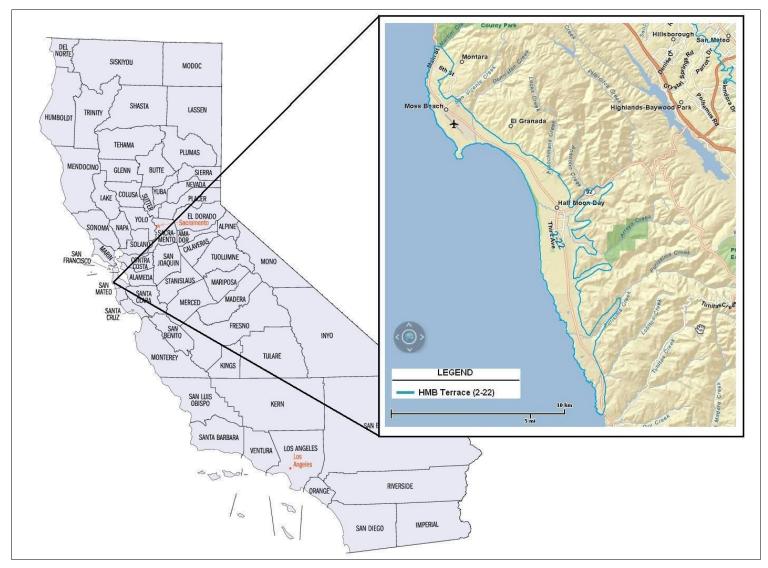


Figure 1. Half Moon Bay Terrace Basin (DWR Bulletin 118 Basin 2-22)

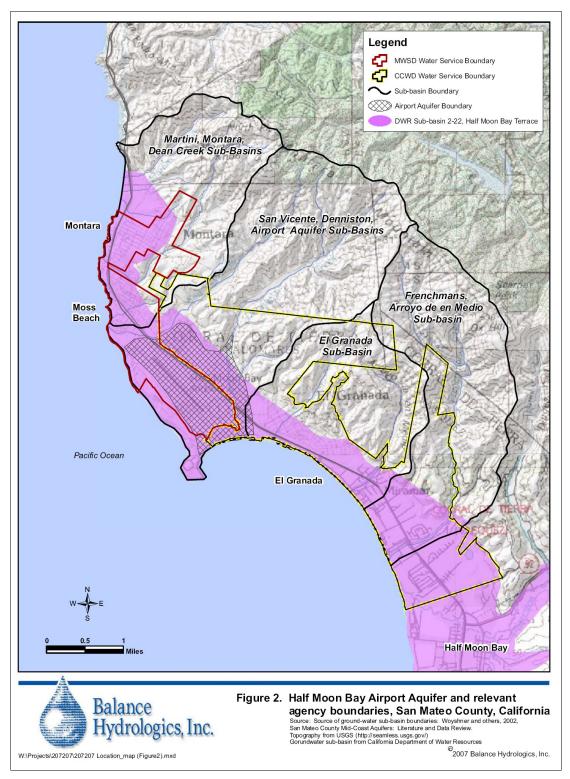


Figure 2. Airport Terrace Sub-basin Image courtesy of Balance Hydrologics, Inc.

Stakeholder Collaboration

In order to achieve successful development and implementation of the Mid-Coastside GWMP, it is essential to foster partnerships and build consensus. An Advisory Committee made up of Midcoast Stakeholders will be established to guide this process. Potential Midcoast stakeholders include Montara Water and Sanitary District (MWSD), Coastside County Water District (CCWD), Resource Conservation District (RCD), Peninsula Open Space Trust (POST), Pillar Ridge Mobile Home Park, the future Big Wave development, local farmers and other stakeholders. The Advisory Committee will perform ongoing outreach to other stakeholders throughout the Midcoast to ensure broad understanding of the developing plan.

Various public outreach materials will be developed including informational handouts, brochures, poster boards, newsletters, and website postings. Information presented in outreach materials will be derived from the technical tasks for developing the Mid-Coastside GWMP.

Outreach will also include collaboration with state regulatory agencies including the Department of Water Resources, the California Department of Public Health and the Regional Water Quality Control Board.

Implementation and Financing Plan

An Implementation Plan will be developed to identify needed monitoring, trigger points, and steps necessary to fully implement the BMOs and water management strategies. The method of implementation will be defined by the stakeholders and Advisory Committee through the meetings taking place as part of Task 1. Two major management processes will be considered - the individual interest–based model and the mutual interest–based model. An implementation model can be a combination of the two so that the advantages of regional water management are realized without individuals feeling a loss of control over local management. Recommended implementation steps will be provided in the Implementation Plan along with a time line for each identified step.

Implementation may require a Memorandum of Understanding or a Joint Powers Authority. A Board of Directors may need to be formed with representatives from stakeholders or Advisory Committee to guide the implementation of the GWMP.

The implementation of the Mid-Coastside GWMP, which includes a Board of Directors, Monitoring Program, and water management projects can be a major financial undertaking. A financing plan will be developed that provide the potential Board, Advisory Committee and other stakeholders with an overview of potential funding sources, programs and local and regional partnerships available in the Midcoast.